

REMARKS

Claims 4-5 are cancelled; claims 35-36 are new; thus, claims 1-2, 6-9, 12-14, and 26-36 are all the claims pending in the application. Claims 1-2, 4-9, 12-14, and 26-34 stand rejected on prior art grounds. Applicants respectfully traverse these rejections based on the following discussion.

I. The Prior Art Rejections

Claims 1-2, 4-9, and 12-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Luning (U.S. Patent No. 6,506,642) and Nandakumar (U.S. Patent No. 6,479,339). Claims 26-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Luning and Fulford (U.S. Patent No. 6,258,680). Applicants respectfully traverse these rejections based on the following discussion.

In the rejection, the Office Action argues that the prior art of record discloses many features of the claimed invention. However, Fulford teaches multiple, stepped implant regions. Therefore, Fulford teaches away from the claimed features “wherein said first-type impurity implants are single and non-stepped ... [and] wherein said second-type impurity implants are single and non-stepped” (claims 1, 35 and 36). Additionally, Fulford does not teach the claimed feature “wherein said etch stop layer is between bottom surfaces of said second spacers and said oxide layer”. Instead, the bottom surfaces of item 160 and 162 (which the Office action asserts teaches the “second spacers” of the claimed invention) are directly on item 128 (which the Office action asserts teaches the “oxide layer” of the claimed invention). Moreover, Luning does not

disclose an etch stop layer or an oxide layer. Therefore, as explained in greater detail below, Applicants respectfully submit that the prior art of record does not teach or suggest the claimed invention.

Applicants traverse the rejections because the prior art of record fails to teach or suggest the claimed features “wherein said first-type impurity implants are single and non-stepped ... [and] wherein said second-type impurity implants are single and non-stepped”. Such features are defined in independent claim 1 and dependent claims 35 and 36 using identical language.

As illustrated in FIG. 12 of Fulford, the integrated circuit structure includes LDD implants 122, 124 and additional stepped implant regions. More specifically, the integrated circuit structure of Fulford also includes second implant regions 142 and 144, third implant areas 154 and 156, and fourth implant areas 166 and 168.

To the contrary, as illustrated in FIGS. 7-8 of Applicants disclosure, an integrated circuit structure is provided that includes single non-stepped impurity implants. More specifically, first-type impurity implants 404 and second-type impurity implants 604 are provided. Both impurity implants 404 and 604 are “single and non-stepped”.

Accordingly, Applicants submit that unlike the claimed invention, Fulford teaches multiple, stepped implant regions. Therefore, it is Applicants position that Fulford teaches away from the claimed features “wherein said first-type impurity implants are single and non-stepped ... [and] wherein said second-type impurity implants are single and non-stepped” (claims 1, 35 and 36); and, as such, it would not have been obvious to combine Fulford with Luning to arrive at the claimed invention.

In addition, Applicants traverse the rejections because the prior art of record fails to teach or suggest the claimed features “wherein said etch stop layer is between bottom surfaces of said second spacers and said oxide layer”. Such features are defined in independent claims 1, 8, and 26 using identical language. More specifically, as illustrated in FIGS. 7-8 of Applicants’ disclosure, the etch stop layer 500 is between the bottom surfaces of the second spacers 502 and the oxide layer 106.

To the contrary, as illustrated in FIG. 12 of Fulford the bottom surfaces of item 160 and 162 (which the Office action asserts teaches the “second spacers” of the claimed invention) are directly on item 128 (which the Office action asserts teaches the “oxide layer” of the claimed invention). Thus, item 150 (which the Office action asserts teaches the “etch stop layer” of the claimed invention) is not between bottom surfaces of the second spacers and the oxide layer. Furthermore, Applicants submit that Luning does not disclose an etch stop layer or an oxide layer. Therefore, it is Applicants’ position that the prior art of record does not teach or suggest the claimed features “wherein said etch stop layer is between bottom surfaces of said second spacers and said oxide layer” as defined in independent claims 1, 8, and 26.

Therefore, it is Applicants’ position that the prior art of record does not teach or suggest many features defined by independent claims 1, 8, and 26 and that such claims are patentable over the prior art of record. Further, it is Applicants’ position that dependent claims 2, 6-7, 9, 12-14, and 27-36 are similarly patentable, not only because of their dependency from a patentable independent claims, but also because of the additional

features of the invention they defined. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

II. Formal Matters and Conclusion

In view of the foregoing, Applicants submit that claims 1-2, 6-9, 12-14, and 26-36, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0458.

Respectfully submitted,

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